

**Summary**

A method for adjusting the relative output power of individual output wavelengths of a multi-output-wavelength Raman laser (10) is disclosed. The method is characterized by the steps of suppressing the relative output power of a potentially most powerful output wavelength (98) in a first step (108), adjusting the relative output power of the shortest output wavelength (94) in a second step (110), adjusting the relative output power of further output wavelengths (96, 100, 102, 104) in a third step (112), and adjusting the relative output power of the potentially most powerful output wavelength (98) in a fourth step (114). Further, a device (68) that performs such a method is disclosed, i.e. a device for adjusting the relative output power of individual output wavelengths (94, 96, 98, 100, 102, 104) of such a laser (10).